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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,382	09/19/2003	Jane Campbell Mazzagatti	TN188A	8502

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EXAMINER	
AL HASHEMI, SANA A	

ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,382	MAZZAGATTI, JANE CAMPBELL	
	Examiner	Art Unit	
	Sana Al-Hashemi	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 23-35* is/are rejected.

7)☒ Claim(s) *17-22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/20/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claim Status: 1- 35 are presented fro examination.

Double Patenting

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

3. A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claims 1- 35 of US Patent Application #No. 10/385,421 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1- 35 of U.S. Patent Application No.10/666.

This is a double patenting rejection.

5. The following table shows the claims 1-35 in the instant application "10/666,382" that are rejected by corresponding claims 1-35 in US Patent Application 10/385,421.

Claims Comparison Table:

10385,421	10/666,382
Claims 1-35	Claims 1-35

6. Regarding claims 1-35, of the instant application, are duplicate of claims 1-35 of US Patent Application 10/385,421 are rejected When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording. The claims are rejected under double patenting rejection.

7. Claims 17-22 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-16, and 23-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgenstern US Patent No. 5,970,490.

As per Claims 1, 13, and 25, Morgenstern discloses a system for generating a tree-based data store comprising:

a processor (Fig. 1, 1, Morgenstern);

a memory coupled to the processor (Fig. 1, 14, the computer has a memory, Morgenstern); and

a tree-based data store generator for creating at least one level of a tree-based data store,

the at least one level of the tree-based data store comprising a first tree (Fig. 3, 112, Morgenstern) comprising a first root and at least one node of a plurality of nodes (Fig. 3, 114, Morgenstern), a second tree (Fig. 3, 120, Morgenstern) comprising a second root (Fig. 3, 125, Morgenstern) and the at least one node of the first tree (Fig. 3, 114,Morgenstern) and at least a third tree (Fig. 3, 135, Morgenstern) comprising a third root (Fig. 3, 134,Morgenstern)and at least one of the plurality of nodes of the first tree (Fig. 3, 11412b, Morgenstern).

As per Claims 2, 14, Morgenstern discloses a system, wherein the nodes of the data store include at least one elemental node, one subcomponent node and one end product node (Fig. 142, and 143, Morgenstern).

As per Claim 3, Morgenstern discloses a system, wherein the tree-based data store comprises at least a first level and a second level and the end products of the first level comprise the elemental nodes of the second level (Fig. 3, 114, Morgenstern).

As per Claim 4, Morgenstern discloses a system, wherein the tree-based data store comprises at least a first level and a second level and the end products of the first level are decomposed to create the elemental nodes of the first level (Col. 4, lines 47-55, Morgenstern).

As per Claim 5, Morgenstern discloses a system, wherein the tree-based data store comprises at least a first level and a second level and the elemental nodes of the second level are decomposed to create the elemental nodes of the first level (Col. 12, liens 53-58, Morgenstern).

As per Claims 6, Morgenstern discloses a system, wherein the nodes comprise pointers to other nodes in the tree-based data store (Col. 12, lines 59-64, Morgenstern).

As per Claim 7, Morgenstern discloses a system, wherein the first root and second root comprise pointers to other nodes in the tree-based data store and include non-pointer information (Fig. 3, 132, 124, Morgenstern).

As per Claim 8, Morgenstern discloses a system, wherein the first root is associated with a begin indicator and accesses the tree-based data store in a first hierarchical order (Fig. 3, 114, Morgenstern).

As per Claim 9, Morgenstern discloses a system, wherein the second root is associated with an end indicator and accesses the tree-based data store in an inverted first hierarchical order (Fig. 3, 114, Morgenstern).

As per Claim 10, Morgenstern discloses a system, wherein the third root includes non-pointer information associated with an element of a data set and accesses the tree-based data store in a third hierarchical order based on the data set element (Col. 14, lines 6-14, Morgenstern[1]).

As per Claim 11, Morgenstern discloses a system, further comprising a tree-based data store accessor for retrieving information from the tree-based data store (Col. 5, lines 18-25, Morgenstern).

As per Claims 12, and 24, Morgenstern discloses a system, wherein the tree-based data store accessor further comprises:

means for receiving a request for information to be retrieved from the tree-based data store (Col. 5, lines 49-53, Morgenstern);

[1] Examiner interpret the matching step corresponds to non-pointer information since the match has not been completed and the information has not been linked to a specific pointer.

means for retrieving the requested information from the tree-based data store (Col. 8, lines 58-63, Morgenstern); and

means for returning the retrieved information from the tree-based data store (Col. 8, lines 64-66, Morgenstern)..

As per Claim 15, Morgenstern discloses a system, wherein the first type tree records the sequential synthesis of an end product from at least one combination of a subcomponent node with an elemental node and provides access to data in the data store in a first context (Col. 14, lines 50-55, Morgenstern).

As per Claim 16, Morgenstern discloses a system, wherein at least one tree of the plurality of trees of the second type provides access to the data in the data store in a second context (Col. 14, lines 57-62, Morgenstern)..

As per Claim 23, Morgenstern discloses a system, further comprising an accessor for accessing information stored in the interlocking tree data store (Col. 14, lines 31-40, Morgenstern).

As per Claims 26, and 35, Morgenstern discloses a method, comprising:

in response to receiving data to be added to the tree-based data store, creating a new node in the tree-based data store for storing information associated with the received data ((Col. 8, lines 58-61, Morgenstern).;

creating links from the new node to a first node comprising a first portion of the new node and a second node comprising a second portion of the new node (Col. 8, lines 61-63, Morgenstern);

adding a link to the new node to a first list of pointers of the first node (Col. 8, lines 64-67, Morgenstern); and

adding a link to the new node to a second list of pointers of the second node (Col. 8, lines 61-63, Morgenstern).

As per Claim 27, Morgenstern discloses a method, wherein creating a new node in the tree-based data store comprises combining a first node representing a begin indicator with a second node representing a dataset element to generate a third node representing an incomplete product (Col. 30, lines 44-52, Morgenstern).

As per Claim 28, Morgenstern discloses a method, wherein creating a new node in the tree-based data store comprises combining a first node representing a first incomplete product with a second node representing a dataset element to generate a third node representing a second incomplete product (Col. 30, lines 53-58, Morgenstern).

As per Claim 29, Morgenstren discloses a method, wherein creating a new node in the tree-based data store comprises combining a first incomplete product with a fourth node representing an end indicator to generate a fifth node representing an end product (Fig. 3, 130, Morgenstern).

As per Claim 30, Morgenstern discloses a method, wherein creating a new node in the tree-based data store comprises combining a second incomplete product with a fourth node representing an end indicator to generate a fifth node representing an end product (Col. 22, lines 23-33, Morgenstern).

As per Claim 31, .The method of claim 26, wherein creating a new node comprises allocating space for a first pointer, a second pointer, a third pointer and a fourth pointer (Col. 22, lines 47-58, Morgenstern).

As per Claim 32, Morgenstern discloses a method, wherein the third pointer and fourth pointer are null pointers (Col. 43, lines 13-21, Morgenstern).

As per Claim 33, Morgenstern discloses a method for accessing information from a tree-based data store, the method comprising:

in response to receiving a request for information from a data store, the information request comprising at least one constraint, the data store comprising at least one level of a tree based data store, the at least one level of the tree-based data store comprising a first tree comprising a first root and at least one node of a plurality of nodes, a second tree comprising a second root and the at least one node of the first tree and at least a third tree comprising a third root and at least one of the plurality of nodes of the first tree (Col. 15, lines 15-26, Morgenstern),

retrieving a list of nodes associated with the third root each node in the list of nodes comprising a first portion and a second portion, wherein the third root comprises the at least one constraint (Col. 15, lines 31-34, Morgenstern); and

following the branch of each node in the first tree to the at least one node of the second tree (Col. 15, lines 31-34, Morgenstern).

Claim 34 a method, wherein the request for information comprises a first constraint and a second constraint and the intersection of the sets of nodes of the second tree is returned (Col. 15, lines 35-45, Morgenstern).

Allowable Subject Matter

9. Claims 17-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: Prior art of record fails teach, disclose or suggest the steps of the at least one elemental node comprises a first null pointer, a second null pointer, a third null pointer and a fourth pointer pointing to a second list of pointers to nodes, the second list comprising nodes which contain the elemental node as their second portion, at least one subcomponent node comprises a first pointer to a first node, the first node comprising a first portion of the subcomponent node, a second pointer to a second node, the second node comprising a second portion of the subcomponent node, a third pointer pointing to a first list of pointers to nodes, the first list comprising nodes which contain the subcomponent as their first portion and a fourth null pointer, at least one end product node comprises at least a first pointer to a first portion, a second pointer to an ending indicator second portion, a third null pointer and a fourth pointer pointing to a second list of pointers to nodes, the second list comprising nodes which contain the end product node as their second portion, the root node representing a begin indicator comprises a first null pointer, a second null pointer, a third pointer pointing to a first list of pointers to nodes, the first list comprising nodes comprising the begin indicator as a first portion and a fourth null pointer, root node representing a dataset element comprises a first null pointer, a second null pointer, a third null pointer and a fourth pointer pointing to a second list of pointers to nodes, the second list

comprising nodes comprising the dataset element as a second portion, and wherein a root node representing an end product comprises a first null pointer, a second null pointer, a third null pointer and a fourth pointer pointing to a second list of pointers to nodes, the second list comprising nodes of a second level comprising the end product as a second portion.

Conclusion

Other Prior Art Made of Record

1.Agrawal et al.(US Patent No. 6,233,575) discloses a multilevel taxonomy based on features derived from training documents classification using fisher values as discrimination values.

2. Kothuri et al. (US Patent No. 6,505,205) discloses a relational database system for storing nodes of a hierarchical index of multi-dimensional data in a first module and metadata regarding the index in a second module.

3. Marguis (US Patent No. 5,930,805) discloses a storage and retrieval of ordered sets of key in a compact o- complete tree.

4. Morgenstern (US Patent No. 5,970,490) discloses an integration platform for heterogeneous database.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to: Sana Al-Hashemi whose telephone number is (571) 272-4013.

The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023. Any response to this office action should be mailed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231. Or telefax at phone number (703) 872-9306. For formal or draft communications, please label "PROSPOSED" or "DRAFT". Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6th Floor Receptionist, Arlington, Virginia. 22202.

Sana Al-Hashemi
Patent Examiner
Technology Center 2100
January 12, 2005

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